

(10). 1994. 1147. ISSN: 0031-949X

DT Conference

LA English

L5 ANSWER 47 OF 47 BIOSIS COPYRIGHT 1998 BIOSIS

AN 92:459369 BIOSIS

DN BA94:100769

TI THE FUNCTION OF VACUOLAR BETA-1 3 **GLUCANASE** INVESTIGATED BY  
ANTISENSE **TRANSFORMATION**. SUSCEPTIBILITY OF

**TRANSGENIC** NICOTIANA-SYLVESTRIS PLANTS TO

CERCOSPORA-NICOTIANAE INFECTION.

AU NEUHAUS J-M; FLORES S; KEEFE D; AHL-GOY P; MEINS F JR

CS FRIEDRICH MIESCHER-INST., P.O. BOX 2543, CH-4002, SWITZERLAND.

SO PLANT MOL BIOL 19 (5). 1992. 803-813. CODEN: PMBIDB ISSN: 0167-4412

LA English

=> d 147 2 abs

L47 NOT FOUND

The L-number entered has not been defined in this session, or it has been deleted. To see the L-numbers currently defined in this session, enter DISPLAY HISTORY at an arrow prompt (=>).

=> d 15 2 abs

L5 ANSWER 2 OF 47 CAPLUS COPYRIGHT 1998 ACS

AB Bacterial **glucanase** with a carrot extensin leader peptide was shown to be effectively secreted into the intercellular space in tobacco **transgenic** plants. A comparison of the **glucanase** activities in two samples of **transgenic** plants indicated that the heterologous enzyme was more stable in the intercellular space than within the **plant** cells. To study the secretion of **plant** proteins and the role of .beta.-1,3;1,4-**glucanase** in the **plant** defense response, a combination of the rbcS **plant** promoter, the sequence for the carrot extensin leader peptide, and the sequence for thermostable bacterial **glucanase** with a high specific activity was used.

09/003,047

\*\*\*\*\*

=> s transgenic

L1 2133 TRANSGENIC

=> s plant

L2 119203 PLANT

=> s glucanase

L3 475 GLUCANASE

=> s 11 and 12 and 13

L4 82 L1 AND L2 AND L3

=> s potato

L5 18020 POTATO

=> s 14 and 15

L6 65 L4 AND L5

=> s transformation

L7 53602 TRANSFORMATION

=> s 16 and 17

L8 59 L6 AND L7

=> s microbial

L9 17896 MICROBIAL

=> s 18 and 19

L10 21 L8 AND L9

=> d 110 1-21

1. 5,773,696, Jun. 30, 1998, Antifungal polypeptide and methods for controlling **plant** pathogenic fungi; Jihong Liang, et al., 800/279; 435/320.1, 419; 536/23.6; 800/301, 302 [IMAGE AVAILABLE]
2. 5,714,474, Feb. 3, 1998, Production of enzymes in seeds and their use; Albert J. J. Van Ooijen, et al., 514/44; 119/174; 426/20, 21, 629, 630, 635; 435/69.1, 183, 196, 202; 514/2 [IMAGE AVAILABLE]
3. 5,712,112, Jan. 27, 1998, Gene expression system comprising the promoter region of the alpha-amylase genes; Su May Yu, et al., 435/69.1, 69.7, 69.8, 70.1, 410, 420, 469; 536/23.1, 23.6, 24.1 [IMAGE AVAILABLE]
4. 5,705,375, Jan. 6, 1998, **Transgenic** plants having a modified carbohydrate content; Albert Johannes Joseph Van Ooyen, et al., 800/284; 435/95, 96, 201, 202, 205, 252.3, 320.1, 375; 536/23.7, 24.1, 24.5;

5. 5,703,044, Dec. 30, 1997, Synergistic antifungal protein and compositions containing same; Walden K. Roberts, et al., 514/12, 2, 8; 530/372, 376 [IMAGE AVAILABLE]
6. 5,695,939, Dec. 9, 1997, **Plant** defense genes and **plant** defense regulatory elements; Qun Zhu, et al., 435/6; 536/23.2, 24.3 [IMAGE AVAILABLE]
7. 5,689,056, Nov. 18, 1997, HMG2 promoter expression system; Carole Lyn Cramer, et al., 800/301; 435/69.1, 70.1, 320.1; 536/23.1, 23.6, 24.1; 800/302 [IMAGE AVAILABLE]
8. 5,670,706, Sep. 23, 1997, Fungal resistant plants, process for obtaining fungal resistant plants and recombinant polynucleotides for use therein; Bernardus J. C. Cornelissen, et al., 800/279; 435/252.3, 320.1; 800/294, 301, 317.4 [IMAGE AVAILABLE]
9. 5,670,349, Sep. 23, 1997, HMG2 promoter expression system and post-harvest production of gene products in plants and **plant** cell cultures; Carole Lyn Cramer, et al., 435/69.1, 320.1; 536/23.1, 24.1 [IMAGE AVAILABLE]
10. 5,608,151, Mar. 4, 1997, Anti-**microbial** proteins; Kirsten Bojsen, et al., 800/298; 435/69.1, 252.3; 536/23.6; 800/301, 320.1 [IMAGE AVAILABLE]
11. 5,607,919, Mar. 4, 1997, Anti-**microbial** proteins; Kirsten Bojsen, et al., 514/12; 530/370 [IMAGE AVAILABLE]
12. 5,567,862, Oct. 22, 1996, Synthetic insecticidal crystal protein gene; Michael J. Adang, et al., 800/302; 435/69.1, 418, 468 [IMAGE AVAILABLE]
13. 5,567,600, Oct. 22, 1996, Synthetic insecticidal crystal protein gene; Michael J. Adang, et al., 536/23.71; 435/69.1, 418, 468, 469, 470; 800/279 [IMAGE AVAILABLE]
14. 5,559,034, Sep. 24, 1996, Synergistic antifungal protein and compositions containing same; Walden K. Roberts, et al., 435/320.1, 69.1, 252.3; 514/2, 8, 12; 530/372, 376; 536/22.1, 23.1, 23.6 [IMAGE AVAILABLE]
15. 5,543,576, Aug. 6, 1996, Production of enzymes in seeds and their use; Albert J. J. van Ooijen, et al., 800/317.3; 426/7, 61, 531, 635; 435/68.1, 69.1, 94, 95, 195, 200, 204, 209, 232, 233, 234 [IMAGE AVAILABLE]
16. 5,530,187, Jun. 25, 1996, **Transgenic** plants containing multiple disease resistance genes; Christopher J. Lamb, et al., 800/279; 435/70.1, 200, 209, 320.1, 414, 418; 536/23.2, 23.6; 800/301 [IMAGE AVAILABLE]
17. 5,521,153, May 28, 1996, Synergistic antifungal protein and compositions containing same; Walden K. Roberts, et al., 514/2, 8, 12; 530/372, 376 [IMAGE AVAILABLE]
18. 5,460,952, Oct. 24, 1995, Gene expression system comprising the promoter region of the .alpha.-amylase genes; Su-May Yu, et al., 435/69.1, 69.7, 69.8, 70.1; 536/23.1, 23.6, 24.1 [IMAGE AVAILABLE]
19. 5,446,127, Aug. 29, 1995, Antipathogenic peptides and compositions containing the same; Francisco Garcia-Olmedo, et al., 530/300, 324, 370 [IMAGE AVAILABLE]
20. 5,399,680, Mar. 21, 1995, Rice chitinase promoter; Qun Zhu, et al., 536/24.1; 435/69.1, 91.3, 418, 419 [IMAGE AVAILABLE]

21. 5,380,831, Jan. 10, 1995, Synthetic insecticidal crystal protein gene; Michael J. Adang, et al., 536/23.71; 435/69.1, 91.1, 91.5, 91.52  
[IMAGE AVAILABLE]

=> s transgenic

L1 50782 TRANSGENIC

=> s plant

L2 981799 PLANT

=> s transformation

L3 262584 TRANSFORMATION

=> s glucanase

L4 7458 GLUCANASE

=> s l1 and l2 and l3 and l4

L5 47 L1 AND L2 AND L3 AND L4

=> s potato

L6 91046 POTATO

=> s l5 and l6

L7 0 L5 AND L6

=> d l5 1-47

L5 ANSWER 1 OF 47 CAPLUS COPYRIGHT 1998 ACS

AN 1998:331012 CAPLUS

DN 129:118475

TI Cloning of glucanases and chitinases of *Trichoderma harzianum* and functional analyses in homologous and heterologous systems

AU Cubero, B.; Garcia, I.; Delgado-Jarana, J.; Limon, M. C.; Benitez, T.; Pintor-Toro, J. A.

CS Instituto de Recursos Naturales y Agrobiologia, CSIC, Seville, 41080, Spain

SO Spec. Publ. - R. Soc. Chem. (1998), 219 (Carbohydrates from *Trichoderma Reesei* and Other Microorganisms), 288-296  
CODEN: SROCDO; ISSN: 0260-6291

PB Royal Society of Chemistry

DT Journal

LA English

L5 ANSWER 2 OF 47 CAPLUS COPYRIGHT 1998 ACS

AN 1998:281804 CAPLUS

DN 129:14440

TI The effective secretion of bacterial .beta.-glucanase into the intercellular space in *Nicotiana tabacum transgenic* plants

AU Monzavi-Karbassi, B.; Goldenkova, I. V.; Darbinian, N. S.; Kobets, N. S.; Vasilevko, V. T.; Piruzian, E. S.

CS Institute of Molecular Genetics, Russian Academy of Sciences, Moscow, 123182, Russia

SO Russ. J. Genet. (1998), 34(4), 377-380  
CODEN: RJGEEQ; ISSN: 1022-7954

PB MAIK Nauka/Interperiodica Publishing  
DT Journal  
LA English

L5 ANSWER 3 OF 47 CAPLUS COPYRIGHT 1998 ACS  
AN 1997:618188 CAPLUS  
DN 127:258939

TI Combinations of fungal cell wall degrading enzyme synergistic use  
with fungicides, **transgenic** plants, and agricultural and  
therapeutic uses

IN Harman, Gary E.; Lorito, Matteo; Di Pietro, Antonio; Hayes,  
Christopher K.; Scala, Felice; Kubicek, Christian P.

PA Cornell Research Foundation, Inc., USA

SO PCT Int. Appl., 90 pp.

CODEN: PIXXD2

PI WO 9732973 A1 19970912

DS W: AU, CA, JP

RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT,  
SE

AI WO 97-US3344 19970305

PRAI US 96-611504 19960305

DT Patent

LA English

L5 ANSWER 4 OF 47 CAPLUS COPYRIGHT 1998 ACS  
AN 1997:367389 CAPLUS  
DN 127:61585

TI Silencing of a .beta.-1,3-**glucanase** transgene is overcome  
during seed formation

AU Balandin, Teresa; Castresana, Carmen

CS Centro Nacional de Biotecnologia, C.S.I.C, Campus Universidad  
Autonoma, Madrid, E-28049, Spain

SO Plant Mol. Biol. (1997), 34(1), 125-137

CODEN: PMBIDB; ISSN: 0167-4412

PB Kluwer

DT Journal

LA English

L5 ANSWER 5 OF 47 CAPLUS COPYRIGHT 1998 ACS  
AN 1997:231336 CAPLUS  
DN 126:303834

TI Chemically regulated promoters and pathogenesis-related genes and  
their use in increasing **plant** pathogen resistance

IN Ryals, John A.; Alexander, Danny C.; Beck, James J.; Duesing, John  
H.; et al.

PA Ciba-Geigy Corp., USA

SO U.S., 175 pp. Cont.-in-part of U.S. Ser. No. 93,301, abandoned.

CODEN: USXXAM

PI US 5614395 A 19970325

AI US 94-181271 19940113

PRAI US 88-165667 19880308

US 88-165667 19880308

US 89-305566 19890206

US 89-329018 19890324

US 89-368672 19890620

US 89-425504 19891020

US 89-425504 19891020

US 90-580431 19900907

US 90-632441 19901221

US 91-678378 19910401

US 91-768122 19910927

US 92-848506 19920306

US 92-973197 19921106

US 93-42847 19930406

US 93-45957 19930412

US 93-93301 19930716

DT Patent  
LA English

L5 ANSWER 6 OF 47 CAPLUS COPYRIGHT 1998 ACS

AN 1997:74978 CAPLUS

DN 126:153471

TI Identification of a salicylic acid-responsive element in the promoter of the tobacco pathogenesis-related .beta.-1,3-**glucanase** gene, PR-2d

AU Shah, Jyoti; Klessig, Daniel F.

CS Waksman Institute and Department of Molecular Biology and Biochemistry, Rutgers, The State University of New Jersey, Piscataway, NJ, 08855, USA

SO Plant J. (1996), 10(6), 1089-1101

CODEN: PLJUED; ISSN: 0960-7412

PB Blackwell

DT Journal

LA English

L5 ANSWER 7 OF 47 CAPLUS COPYRIGHT 1998 ACS

AN 1996:621628 CAPLUS

DN 125:270749

TI Constitutive expression of an inducible .beta.-1,3-**glucanase** in alfalfa reduces disease severity caused by the oomycete pathogen *Phytophthora megasperma* f. sp. *medicaginis*, but does not reduce disease severity of chitin-containing fungi

AU Masoud, Sameer A.; Zhu, Qun; Lamb, Chris; Dixon, Richard A.

CS Plant Biology Div., Samuel Roberts Noble Foundation, Ardmore, OK, 73402, USA

SO Transgenic Res. (1996), 5(5), 313-323

CODEN: TRSEES; ISSN: 0962-8819

DT Journal

LA English

L5 ANSWER 8 OF 47 CAPLUS COPYRIGHT 1998 ACS

AN 1996:502539 CAPLUS

DN 125:163479

TI A benzothiadiazole derivative induces systemic acquired resistance in tobacco

AU Friedrich, Leslie; Lawton, Kay; Ruess, Wilhelm; Masner, Peter; Specker, Nicole; Rella, Manuela Gut; Meier, Beatrice; Dincher, Sandra; Staub, Theodor; et al.

CS Ciba-Geigy Agricultural Biotechnology, Research Triangle Park, NC, 27709-2257, USA

SO Plant J. (1996), 10(1), 61-70

CODEN: PLJUED; ISSN: 0960-7412

DT Journal

LA English

L5 ANSWER 9 OF 47 CAPLUS COPYRIGHT 1998 ACS

AN 1996:241158 CAPLUS

DN 124:308848

TI **Transgenic** barley expressing a protein-engineered, thermostable (1,3-1,4)-.beta.-**glucanase** during germination

AU Jensen, Lisbeth Gath; Olsen, Ole; Kops, Oliver; Wolf, Norbert; Thomsen, Karl Kristian; von Wettstein, Diter

CS Dep. Physiol., Carlsberg Lab., Copenhagen, DK-2500, Den.

SO Proc. Natl. Acad. Sci. U. S. A. (1996), 93(8), 3487-91

CODEN: PNASA6; ISSN: 0027-8424

DT Journal

LA English

L5 ANSWER 10 OF 47 CAPLUS COPYRIGHT 1998 ACS

AN 1996:235809 CAPLUS

DN 124:312496

TI Apoplastic expression of xylanase and .beta.(1-3,1-4)

**glucanase** domains of the xyn D gene from *Ruminococcus flavefaciens* leads to functional polypeptides in **transgenic** tobacco plants

AU Herbers, Karin; Flint, Harry J.; Sonnewald, Uwe  
 CS Institut für Pflanzengenetik und Kulturpflanzenforschung,  
 Gatersleben, 06466, Germany  
 SO Mol. Breed. (1996), 2(1), 81-7  
 CODEN: MOBRFL; ISSN: 1380-3743  
 DT Journal  
 LA English

L5 ANSWER 11 OF 47 CAPLUS COPYRIGHT 1998 ACS  
 AN 1996:169822 CAPLUS  
 DN 124:222078  
 TI Construction of *Nicotiana tabacum* **transgenic** plants  
 expressing the bacterial gene for .beta.-1,3-**glucanase**:  
 II. **Transgenic** plants expressing the .beta.-1,3-  
**glucanase** gene of *Clostridium thermocellum* represent a model  
 for studying differential expression of stress response-related  
 genes

AU Darbinyan, N. S.; Popov, Yu. G.; Mochul'skii, A. V.; Oming, G.;  
 Piruzyan, E. S.; Vasilevko, V. T.  
 CS Yerevan State Univ., Yerevan, 375008, Armenia  
 SO Russ. J. Genet. (Transl. of Genetika (Moscow)) (1996), 32(2), 178-83  
 CODEN: RJGEEQ; ISSN: 1022-7954  
 DT Journal  
 LA English

L5 ANSWER 12 OF 47 CAPLUS COPYRIGHT 1998 ACS  
 AN 1996:169821 CAPLUS  
 DN 124:222077  
 TI Construction of *Nicotiana tabacum* **transgenic** plants  
 expressing the bacterial gene for .beta.-1,3-**glucanase**: I.  
 Construction of vectors for transfection of **plant** cells  
 and expression of the modified .beta.-1,3-**glucanase** gene  
 from *Clostridium thermocellum* in tobacco protoplasts

AU Darbinyan, N. S.; Popov, Yu. G.; Mochul'skii, A. V.; Volkova, L. V.;  
 Piruzyan, E. S.; Vasilevko, V. T.  
 CS Yerevan State Univ., Yerevan, 375008, Armenia  
 SO Russ. J. Genet. (Transl. of Genetika (Moscow)) (1996), 32(2), 172-7  
 CODEN: RJGEEQ; ISSN: 1022-7954  
 DT Journal  
 LA English

L5 ANSWER 13 OF 47 CAPLUS COPYRIGHT 1998 ACS  
 AN 1996:78203 CAPLUS  
 DN 124:137429  
 TI The expression of an abundant transmitting tract-specific  
 endoglucanase (Sp41) is promoter-dependent and not essential for the  
 reproductive physiology of tobacco

AU Sessa, Guido; Fluhr, Robert  
 CS Dep. Plant Genetics, Inst. Science, Rehovot, 76100, Israel  
 SO Plant Mol. Biol. (1995), 29(5), 969-82  
 CODEN: PMBIDB; ISSN: 0167-4412  
 DT Journal  
 LA English

L5 ANSWER 14 OF 47 CAPLUS COPYRIGHT 1998 ACS  
 AN 1996:44500 CAPLUS  
 DN 124:108012  
 TI Genomic male sterility in lettuce, a baseline for the production of  
 F1 hybrids

AU Curtis, Ian S.; He, Caiping; Scott, Rod; Power, J. Brian; Davey,  
 Michael R.  
 CS Plant Genetic Manipulation Group, Department of Life Science,  
 University of Nottingham, Nottingham, NG7 2RD, UK



SO Plant Sci. (Shannon, Irel.) (1996), 113(1), 113-19  
CODEN: PLSCE4; ISSN: 0168-9452

DT Journal  
LA English

L5 ANSWER 15 OF 47 CAPLUS COPYRIGHT 1998 ACS  
AN 1996:16540 CAPLUS  
DN 124:107975  
TI Evaluation of the role of .beta.-1,3-**glucanase** in  
**transgenic** plants  
AU Zheng, Yuzhi  
CS North Dakota State Univ. of Agriculture and Applied Science, ND, USA  
SO (1995) 126 pp. Avail.: Univ. Microfilms Int., Order No.: DA9533129  
From: Diss. Abstr. Int., B 1995, 56(6), 3053  
DT Dissertation  
LA English

L5 ANSWER 16 OF 47 CAPLUS COPYRIGHT 1998 ACS  
AN 1995:770661 CAPLUS  
DN 123:223066  
TI Enhanced quantitative resistance against fungal disease by  
combinatorial expression of different barley antifungal proteins in  
**transgenic** tobacco  
AU Jach, Guido; Goernhardt, Birgit; Mundy, John; Logemann, Juergen;  
Pinsdorf, Elke; Leah, Robert; Schell, Jeff; Maas, Christoph  
CS Abteilung Genetische Grundlagen der Pflanzenzuchtung, Max-Planck  
Institut Zuechtungsforschung, Cologne, D-50829, Germany  
SO Plant J. (1995), Volume Date 1995, 8(1), 97-109  
CODEN: PLJUED; ISSN: 0960-7412  
DT Journal  
LA English

L5 ANSWER 17 OF 47 CAPLUS COPYRIGHT 1998 ACS  
AN 1995:549415 CAPLUS  
DN 122:283865  
TI Introduction of foreign genes into cereal tissue by  
**transformation** of embryonic meristem and the preparation of  
**transgenic** plants  
IN Salmenkallio-Marttila, Marjatta; Aspegren, Kristian; Ritala, Anneli;  
Mannonen, Leena; Kurten, Ulrika; Puupponen-Pimiae, Riitta;  
Kauppinen, Veli; Teeri, Teemu H.  
PA Valtion Teknillinen Tutkimuskeskus, Finland  
SO PCT Int. Appl., 40 pp.  
CODEN: PIXXD2  
PI WO 9506127 A1 19950302  
DS W: AU, BR, CA, CN, CZ, FI, JP, LT, LV, NO, NZ, RU, US  
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE  
AI WO 94-FI365 19940822  
PRAI FI 93-3682 19930820  
DT Patent  
LA English

L5 ANSWER 18 OF 47 CAPLUS COPYRIGHT 1998 ACS  
AN 1995:523510 CAPLUS  
DN 123:5663  
TI Secretion of a heat-stable fungal .beta.-**glucanase** from  
**transgenic**, suspension-cultured barley cells  
AU Aspegren, Kristian; Mannonen, Leena; Ritala, Anneli;  
Puupponen-Pimia, Riitta; Kurten, Ulrika; Salmenkallio-Marttila,  
Marjatta; Kauppinen, Veli; Teeri, Teemu H.  
CS Institute of Biotechnology, University of Helsinki, FIN-00014,  
Finland  
SO Mol. Breed. (1995), 1(1), 91-9  
CODEN: MOBRFL; ISSN: 1380-3743  
DT Journal  
LA English

L5 ANSWER 19 OF 47 CAPLUS COPYRIGHT 1998 ACS  
 AN 1995:475465 CAPLUS  
 DN 123:49043  
 TI Differential in vitro DNA binding activity to a promoter element of the *gn1 .beta.-1,3-glucanase* gene in hypersensitively reacting tobacco plants  
 AU Alonso, Elena; Niebel, Fernanda De Carvalho; Obregon, Patricia; Gheysen, Godelieve; Inze, Dirk; Van Montagu, Marc; Castresana, Carmen  
 CS Centro de Investigaciones Biologicas, C.S.I.C., Madrid, E-28006, Spain  
 SO Plant J. (1995), 7(2), 309-20  
 CODEN: PLJUED; ISSN: 0960-7412  
 DT Journal  
 LA English

L5 ANSWER 20 OF 47 CAPLUS COPYRIGHT 1998 ACS  
 AN 1994:626591 CAPLUS  
 DN 121:226591  
 TI Enhanced protection against fungal attack by constitutive co-expression of chitinase and *glucanase* genes in **transgenic** tobacco  
 AU Zhu, Qun; Maher, Eileen A.; Masoud, Sameer; Dixon, Richard A.; Lamb, Chris J.  
 CS Plant Biol. Lab., Salk Inst. Biol. Studies, La Jolla, CA, 92037, USA  
 SO Bio/Technology (1994), 12(8), 807-12  
 CODEN: BTCHDA; ISSN: 0733-222X  
 DT Journal  
 LA English

L5 ANSWER 21 OF 47 CAPLUS COPYRIGHT 1998 ACS  
 AN 1994:319601 CAPLUS  
 DN 120:319601  
 TI Evidence for a role of *.beta.-1,3-glucanase* in dicot seed germination  
 AU Vogeli-Lange, Regina; Voegeli-Lange, Regina; Hart, Craig M.; Beffa, Roland; Nagy, Ferenc; Meins, Frederick Jr  
 CS Friedrich Miescher-Institut, Basel, CH-4002, Switz.  
 SO Plant J. (1994), 5(2), 273-8  
 CODEN: PLJUED; ISSN: 0960-7412  
 DT Journal  
 LA English

L5 ANSWER 22 OF 47 CAPLUS COPYRIGHT 1998 ACS  
 AN 1993:621539 CAPLUS  
 DN 119:221539  
 TI Genetic engineering and **plant** breeding, especially cereals  
 AU von Wettstein, Diter  
 CS Dep. Physiol., Carlsberg Lab., Copenhagen Valby, DK-2500, Den.  
 SO Food Rev. Int. (1993), 9(3), 411-22  
 CODEN: FRINEL; ISSN: 8755-9129  
 DT Journal; General Review  
 LA English

L5 ANSWER 23 OF 47 CAPLUS COPYRIGHT 1998 ACS  
 AN 1993:76107 CAPLUS  
 DN 118:76107  
 TI Cloning of cDNA for novel *.beta.-1,3-glucanase* activity of soybean  
 IN Sass, Catherine; Leguay, Jean Jacques; Grison, Rene; Toppan, Alain  
 PA Elf Sanofi, Fr.; Societe Nationale Elf Aquitaine  
 SO PCT Int. Appl., 80 pp.  
 CODEN: PIXXD2  
 PI WO 9216632 A1 19921001  
 DS W: AU, CA, JP, US

RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE  
 AI WO 92-FR268 19920325  
 PRAI FR 91-3588 19910325  
 DT Patent  
 LA French

L5 ANSWER 24 OF 47 CAPLUS COPYRIGHT 1998 ACS  
 AN 1992:528337 CAPLUS  
 DN 117:128337  
 TI The function of vacuolar .beta.-1,3-**glucanase** investigated  
 by antisense **transformation**. Susceptibility of  
**transgenic** *Nicotiana sylvestris* plants to *Cercospora*  
*nicotianae* infection  
 AU Neuhaus, Jean Marc; Flores, Susan; Keefe, Dennis; Ahl-Goy, Patricia;  
 Meins, Frederick, Jr.  
 CS Friedrich Miescher-Inst., CH-4002, Switz.  
 SO Plant Mol. Biol. (1992), 19(5), 803-13  
 CODEN: PMBIDB; ISSN: 0167-4412  
 DT Journal  
 LA English

L5 ANSWER 25 OF 47 CAPLUS COPYRIGHT 1998 ACS  
 AN 1992:505349 CAPLUS  
 DN 117:105349  
 TI Suppression of .beta.-1,3-**glucanase** transgene expression  
 in homozygous plants  
 AU De Carvalho, Fernanda; Gheysen, Godelieve; Kushnir, Sergei; Van  
 Montagu, Marc; Inze, Dirk; Castresana, Carmen  
 CS Lab. Genet., Univ. Gent, Ghent, B-9000, Belg.  
 SO EMBO J. (1992), 11(7), 2595-602  
 CODEN: EMJODG; ISSN: 0261-4189  
 DT Journal  
 LA English

L5 ANSWER 26 OF 47 CAPLUS COPYRIGHT 1998 ACS  
 AN 1992:211227 CAPLUS  
 DN 116:211227  
 TI Constitutive expression of stress-inducible genes, including  
 pathogenesis-related 1 protein gene in a **transgenic**  
 interspecific hybrid of *Nicotiana glutinosa* .times. *Nicotiana*  
*debneyi*  
 AU Ohashi, Yuko; Ohshima, Masahiro; Itoh, Hirotaka; Matsuoka, Makoto;  
 Watanabe, Shinichiro; Murakami, Taka; Hosokawa, Daijiro  
 CS Natl. Inst. Agrobiol. Resourc., Tsukuba, 305, Japan  
 SO Plant Cell Physiol. (1992), 33(2), 177-87  
 CODEN: PCPHA5; ISSN: 0032-0781  
 DT Journal  
 LA English

L5 ANSWER 27 OF 47 CAPLUS COPYRIGHT 1998 ACS  
 AN 1992:146144 CAPLUS  
 DN 116:146144  
 TI Control of **plant** pathogens with compositions comprising  
 lytic peptides and hydrolytic enzymes and **transgenic**  
 plants producing such compositions  
 IN Ryals, John A.; Gay, Philippe Bernard; Ahl Goy, Patricia A.;  
 Garcia-Olmedo, Francisco  
 PA Ciba-Geigy A.-G., Switz.  
 SO Eur. Pat. Appl., 35 pp.  
 CODEN: EPXXDW  
 PI EP 448511 A1 19910925  
 DS R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE  
 AI EP 91-810144 19910304  
 PRAI US 90-491801 19900312  
 DT Patent  
 LA English

L5 ANSWER 28 OF 47 CAPLUS COPYRIGHT 1998 ACS

AN 1991:529121 CAPLUS

DN 115:129121

TI A chitinase gene from tobacco and the use of the promoter for expression of heterologous genes in plants

IN Meins, Frederick, Jr.; Shinshi, Hideaki; Neuhaus, Jean Marc

PA Ciba-Geigy A.-G., Switz.

SO Eur. Pat. Appl., 62 pp.

CODEN: EPXXDW

PI EP 418695 A1 19910327

DS R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE

AI EP 90-117389 19900910

PRAI CH 89-3334 19890913

DT Patent

LA German

L5 ANSWER 29 OF 47 CAPLUS COPYRIGHT 1998 ACS

AN 1991:201132 CAPLUS

DN 114:201132

TI cDNA cloning of genes for pathogenesis-related proteins for the preparation of **transgenic** disease-resistant plants

IN Ryals, John A.; Alexander, Danny C.; Goodman, Robert M.; Meins, Frederick; Payne, George B.; Stinson, Jeffrey R.; Neuhaus, Jean Marc; Moyer, Mary B.; Ward, Eric Russell; Williams, Shericca Cherrer

PA Ciba-Geigy A.-G., Switz.

SO Eur. Pat. Appl., 77 pp.

CODEN: EPXXDW

PI EP 392225 A2 19901017

DS R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE

AI EP 90-105336 19900321

PRAI US 89-329018 19890324

US 89-368672 19890620

US 89-425504 19891020

DT Patent

LA English

L5 ANSWER 30 OF 47 CAPLUS COPYRIGHT 1998 ACS

AN 1989:418497 CAPLUS

DN 111:18497

TI Cauliflower mosaic virus gene VI causes growth suppression, development of necrotic spots and expression of defence-related genes in **transgenic** tobacco plants

AU Takahashi, Hideki; Shimamoto, Ko; Ehara, Yoshio

CS Fac. Agric., Tohoku Univ., Sendai, 980, Japan

SO MGG, Mol. Gen. Genet. (1989), 216(2-3), 188-94

CODEN: MGGEAE; ISSN: 0026-8925

DT Journal

LA English

L5 ANSWER 31 OF 47 AGRICOLA

AN 97:52778 AGRICOLA

DN IND20578813

TI Enhanced quantitative resistance against fungal disease by combinatorial expression of different barley antifungal proteins in **transgenic** tobacco.

AU Jach, G.; Gornhardt, B.; Mundy, J.; Logemann, J.; Pinsdorf, E.; Leah, R.; Schell, J.; Maas, C.

CS Max-Planck Institut für Züchtungsforschung, Abteilung Genetische Grundlagen der Pflanzenzüchtung, Cologne, Germany.

SO The Plant journal : for cell and molecular biology, July 1995. Vol. 8, No. 1. p. 97-109

Publisher: Oxford : Blackwell Scientific Publishers and BIOS

Scientific Publishers in association with the Society for

Experimental Biology, c1991-

ISSN: 0960-7412

NTE Includes references  
 CY England; United Kingdom  
 DT Article  
 FS Non-U.S. Imprint other than FAO  
 LA English

L5 ANSWER 32 OF 47 AGRICOLA  
 AN 97:17903 AGRICOLA  
 DN IND20550855  
 TI Pathogenesis-related functions of **plant**  
 beta-1,3-glucanases investigated by antisense **transformation**  
 --a review.  
 AU Beffa, R.; Meins, F. Jr  
 CS University of Lausanne, Lausanne, Switzerland.  
 SO Gene, Nov 7, 1996. Vol. 179, No. 1. p. 97-103  
 Publisher: Amsterdam : Elsevier Science.  
 CODEN: GENED6; ISSN: 0378-1119

NTE Paper presented at the Chulabhorn Research Institute Conference on  
 Biotechnology Research and Applications for Sustainable Development  
 held August 7-10, 1995, Bangkok, Thailand.  
 Includes references  
 CY Netherlands  
 DT Article; Law  
 FS Non-U.S. Imprint other than FAO  
 LA English

L5 ANSWER 33 OF 47 AGRICOLA  
 AN 96:58758 AGRICOLA  
 DN IND20534764  
 TI Decreased susceptibility to viral disease of beta-1,3-  
**glucanase**-deficient plants generated by antisense  
**transformation**.  
 AU Beffa, R.S.; Hofer, R.M.; Thomas, M.; Meins, F. Jr  
 CS University of Lausanne, Lausanne, Switzerland.  
 AV DNAL (QK725.P532)  
 SO The Plant cell, June 1996. Vol. 8, No. 6. p. 1001-1011  
 Publisher: [Rockville, MD : American Society of Plant Physiologists,  
 c1989-  
 CODEN: PLCEEW; ISSN: 1040-4651

NTE Includes references  
 CY Maryland; United States  
 DT Article  
 FS U.S. Imprints not USDA, Experiment or Extension  
 LA English

L5 ANSWER 34 OF 47 AGRICOLA  
 AN 96:51197 AGRICOLA  
 DN IND20527910  
 TI Secretion of a heat-stable fungal beta-**glucanase** from  
**transgenic**, suspension-cultured barley cells. [Erratum:  
 1996, v. 2 (1), p. 89.]  
 AU Aspegren, K.; Mannonen, L.; Ritala, A.; Puupponen-Pimia, R.; Kurten,  
 U.; Salmenkallio-Marttila, M.; Kauppinen, V.; Teeri, T.H.  
 CS University of Helsinki, Helsinki, Finland.  
 SO Molecular breeding : new strategies in plant improvement, 1995. Vol.  
 1, No. 1. p. 91-99  
 Publisher: Dordrecht ; Boston : Kluwer Academic Publishers, c1995-  
 CODEN: MOBRFL; ISSN: 1380-3743

NTE Includes references  
 CY Netherlands  
 DT Article  
 FS Non-U.S. Imprint other than FAO  
 LA English

L5 ANSWER 35 OF 47 AGRICOLA  
 AN 96:40162 AGRICOLA

DN IND20520138  
 TI **Transgenic** barley expressing a protein-engineered,  
 thermostable (1,3-1,4-)-beta-**glucanase** during germination.  
 AU Jensen, L.G.; Olsen, O.; Kops, O.; Wolf, N.; Thomsen, K.K.;  
 Wettstein, D. von.  
 CS Carlsberg Laboratory, Copenhagen, Valby, Denmark.  
 AV DNAL (500 N21P)  
 SO Proceedings of the National Academy of Sciences of the United States  
 of America, Apr 16, 1996. Vol. 93, No. 8. p. 3487-3491  
 Publisher: Washington, D.C. : National Academy of Sciences,  
 CODEN: PNASA6; ISSN: 0027-8424  
 NTE Includes references  
 CY District of Columbia; United States  
 DT Article; Conference  
 FS U.S. Imprints not USDA, Experiment or Extension  
 LA English

L5 ANSWER 36 OF 47 AGRICOLA  
 AN 95:20751 AGRICOLA  
 DN IND20451489  
 TI Xyloglucan endotransglycosylase and **plant** growth.  
 AU De Silva, J.; Arrowsmith, D.; Hellyer, A.; Whiteman, S.; Robinson,  
 S.  
 CS Unilever Research Laboratory, Sharnbrook, Bedford, UK  
 AV DNAL (450 J8224)  
 SO Journal of experimental botany, Nov 1994. Vol. 45, No. 280. p.  
 1693-1701  
 Publisher: Oxford : Oxford University Press.  
 CODEN: JEBOA6; ISSN: 0022-0957  
 NTE In the special issue: Growth in planta / edited by T.L. Wang, W.J.  
 Davies, and C.J. Pollock. Proceedings of a meeting held April 11-15,  
 1994, Swansea, UK.  
 Includes references  
 CY England; United Kingdom  
 DT Article  
 FS Non-U.S. Imprint other than FAO  
 LA English

L5 ANSWER 37 OF 47 AGRICOLA  
 AN 93:80100 AGRICOLA  
 DN IND93054245  
 TI Functional analysis of CX-cellulase (endo-beta-1,4-**glucanase**  
 ) gene expression in **transgenic** tomato fruit.  
 AU Lashbrook, C.C.; Bennett, A.B.  
 AV DNAL (S494.5.B563C87)  
 SO Current plant science and biotechnology in agriculture, 1993. Vol.  
 16 p. 123-128  
 Publisher: Dordrecht : Kluwer Academic Publishers.  
 ISSN: 0924-1949  
 NTE In the series analytic: Cellular and molecular aspects of the  
**plant** hormone ethylene / edited by J.C. Pech, A. Latche, and  
 C. Balague. Proceedings of the International Symposium on Cellular  
 and Molecular Aspects of Biosynthesis and Action of the  
**Plant** Hormone Ethylene held August 31-September 4, 1992,  
 Agen, France.  
 Includes references.  
 DT Article  
 FS Non-U.S. Imprint other than FAO  
 LA English

L5 ANSWER 38 OF 47 AGRICOLA  
 AN 93:42465 AGRICOLA  
 DN IND93024110  
 TI Extracellular targeting of the vacuolar tobacco proteins AP24,  
 chitinase and beta-1,3-**glucanase** in **transgenic**  
 plants.

AU Melchers, L.S.; Sela-Buurlage, M.B.; Vloemans, A.S.; Woloshuk, C.P.;  
 Roekel, J.S.C. van; Pen, J.; Elzen, P.J.M. van den; Cornelissen,  
 B.J.C.  
 CS MOGEN International NV, Leiden, The Netherlands  
 AV DNAL (QK710.P62)  
 SO Plant molecular biology : an international journal on molecular  
 biology, biochemistry and genetic engineering, Feb 1993. Vol. 21,  
 No. 4. p. 583-593  
 Publisher: Dordrecht : Kluwer Academic Publishers.  
 ISSN: 0167-4412  
 NTE Includes references.  
 DT Article  
 FS Non-U.S. Imprint other than FAO  
 LA English

L5 ANSWER 39 OF 47 AGRICOLA  
 AN 92:115006 AGRICOLA  
 DN IND92070251  
 TI Premature dissolution of the microsporocyte callose wall causes male  
 sterility in **transgenic** tobacco.  
 AU Worrall, D.; Hird, D.L.; Hodge, R.; Paul, W.; Draper, J.; Scott, R.  
 CS University of Leicester, Leicester, UK  
 AV DNAL (QK725.P532)  
 SO The Plant cell, July 1992. Vol. 4, No. 7. p. 759-771  
 Publisher: Rockville, Md. : American Society of Plant Physiologists.  
 ISSN: 1040-4651  
 NTE Includes references.  
 DT Article  
 FS U.S. Imprints not USDA, Experiment or Extension  
 LA English

L5 ANSWER 40 OF 47 AGRICOLA  
 AN 92:112708 AGRICOLA  
 DN IND92067944  
 TI The function of vacuolar beta-1,3-**glucanase** investigated  
 by antisense **transformation**. Susceptibility of  
**transgenic** *Nicotiana sylvestris* plants to *Cercospora*  
*nicotianae* infection.  
 AU Neuhaus, J.M.; Flores, S.; Keefe, D.; Ahl-Goy, P.; Meins, F. Jr  
 CS Friedrich Miescher-Institut, Switzerland  
 AV DNAL (QK710.P62)  
 SO Plant molecular biology : an international journal on molecular  
 biology, biochemistry and genetic engineering, Aug 1992. Vol. 19,  
 No. 5. p. 803-813  
 Publisher: Dordrecht : Kluwer Academic Publishers.  
 ISSN: 0167-4412  
 NTE Includes references.  
 DT Article  
 FS Non-U.S. Imprint other than FAO  
 LA English

L5 ANSWER 41 OF 47 AGRICOLA  
 AN 92:90630 AGRICOLA  
 DN IND92052794  
 TI Suppression of beta-1,3-**glucanase** transgene expression in  
 homozygous plants.  
 AU Carvalho, F. de; Gheysen, G.; Kushnir, S.; Montagu, M. van; Inze,  
 D.; Castresana, C.  
 CS Universiteit Gent, Gent, Belgium  
 AV DNAL (QH506.E46)  
 SO The EMBO journal - European Molecular Biology Organization, July  
 1992. Vol. 11, No. 7. p. 2595-2602  
 Publisher: Oxford, Eng. : IRL Press.  
 CODEN: EMJODG; ISSN: 0261-4189  
 NTE Includes references.  
 DT Article

FS Non-U.S. Imprint other than FAO  
 LA English

L5 ANSWER 42 OF 47 AGRICOLA  
 AN 92:32088 AGRICOLA  
 DN IND92012098  
 TI Tissue-specific and pathogen-induced regulation of a *Nicotiana plumbaginifolia* beta-1,3-**glucanase** gene.  
 AU Castresana, C.; Carvalho, F. de; Gheysen, G.; Habets, M.; Inze, D.; Montagu, M. van  
 CS Rijksuniversiteit Gent, Gent, Belgium  
 AV DNAL (QK725.P532)  
 SO The Plant cell, Dec 1990. Vol. 2, No. 12. p. 1131-1143  
 Publisher: Rockville, Md. : American Society of Plant Physiologists.  
 ISSN: 1040-4651  
 NTE Includes references.  
 DT Article  
 FS U.S. Imprints not USDA, Experiment or Extension  
 LA English

L5 ANSWER 43 OF 47 BIOSIS COPYRIGHT 1998 BIOSIS  
 AN 97:226731 BIOSIS  
 DN 99518447  
 TI The role of cytokinin biosynthetic gene in regulating the expression of a class of pathogenesis-related protein genes in tobacco plants.  
 AU Ma Qing-Hu; Song Yan-Ru; Sun Jing-San  
 CS Inst. Bot., Acad. Sinica, Beijing 100093, China  
 SO Acta Botanica Sinica 38 (11). 1996. 870-874. ISSN: 0577-7496  
 LA English

L5 ANSWER 44 OF 47 BIOSIS COPYRIGHT 1998 BIOSIS  
 AN 97:71140 BIOSIS  
 DN 99370343  
 TI Identification of a salicylic acid-responsive element in the promoter of the tobacco pathogenesis-related beta-1,3-**glucanase** gene, PR-2d.  
 AU Shah J; Klessig D F  
 CS Waksman Inst., Dep. Molecular Biol., Rutgers, State Univ. New Jersey, P.O. Box 759, Piscataway, NJ 08855, USA  
 SO Plant Journal 10 (6). 1996. 1089-1101. ISSN: 0960-7412  
 LA English

L5 ANSWER 45 OF 47 BIOSIS COPYRIGHT 1998 BIOSIS  
 AN 96:332832 BIOSIS  
 DN 99055188  
 TI Construction of *Nicotiana tabacum* L. **transgenic** plants expressing the bacterial gene for beta-1,3-**glucanase**: I. Construction of vectors for transfection of **plant** cells and expression of the modified beta-1,3-**glucanase** gene from *Clostridium thermocellum* in tobacco protoplasts.  
 AU Darbinyan N S; Popov Yu G; Mochul'skii A V; Volkova L V; Piruzyan E S; Vasilevko V T  
 CS Yerevan State Univ., Yerevan 375008, Armenia  
 SO Genetika 32 (2). 1996. 197-203. ISSN: 0016-6758  
 LA Russian

L5 ANSWER 46 OF 47 BIOSIS COPYRIGHT 1998 BIOSIS  
 AN 95:54149 BIOSIS  
 DN 98068449  
 TI Analysis of **transgenic** alfalfa plants which express genes coding for a rice chitinase and an alfalfa **glucanase**.  
 AU Masoud S; Lamb C J; Dixon R A  
 CS The Samuel Roberts Noble Found., Plant Biol. Div., P.O. Box 2180, Ardmore, OK 73402, USA  
 SO Annual Meeting of the American Phytopathological Society, Albuquerque, New Mexico, USA, August 6-10, 1994. Phytopathology 84